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<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/511,470	BOBIER, JOSEPH A.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Chieh M. Fan	2634	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**  
 All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 4/18/05.
2. ☒ The allowed claim(s) is/are 4-22,33-42 and 45-54.
3. ☒ The drawings filed on 23 February 2000 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS ( as "replacement sheets" ) must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

**Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

- Attachment(s)**
- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)  | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                       |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                               |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance              |
|   | 9. <input type="checkbox"/> Other _____.  |

**DETAILED ACTION**

***Examiner's Amendment***

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Dennis L. Cook on 5/03/05.

The application has been amended as follows:

In the claims:

- a. In claim 10, line 1, "The method of claim 1 including the steps of:" has been deleted.
- b. In claim 33, line 1, "(previously presented)" has been changed to --- (currently amended) ---.
- c. In claim 34, lines 2-3, "synchronization control outputs" has been changed to --- synchronizing control outputs ---.
- d. In claim 39, line 20, "effecting a broadcast therefore" has been changed to --- effecting a broadcast thereof ---.
- e. In claim 40, line 20, "effecting a broadcast therefore" has been changed to --- effecting a broadcast thereof ---.

- f. In claim 45, line 23 (the last line), "effecting a broadcast therefore" has been changed to --- effecting a broadcast thereof ---.
- g. In claim 46, line 2, "synchronization control" has been changed to --- synchronizing control outputs ---.
- h. In claim 49, line 8, "a a wavelet" has been changed to --- a wavelet ---.
- i. In claim 49, line 18, "effecting a broadcast therefore" has been changed to --- effecting a broadcast thereof ---.

***Statement of Reasons for Allowance***

2. The following is an examiner's statement of reasons for allowance:

Regarding claims 4-9 and 15-21, the prior art of record does not teach that the step (c) effects said combining of said phase signal with said sequence of first and second binary signals with select delays for permitting said carrier modulation termination and transmission to persist for the interval of at least a full cycle wavelet.

Regarding claims 10-14, the prior art of record does not teach steps (f) through (l) as recited in claim 10.

Regarding claims 33-38, 41 and 42, the prior art of record does not teach that said synchronizer assembly includes an ANDing assembly having said synchronizing control outputs upon the synchronized occurrence of said first and second binary signals with a said crossover output.

Regarding claim 39, the prior art of record does not teach that said demodulator assembly comprising a first Class A amplifier stage responsive to said received

modulated carrier signal to derive an amplified received modulated carrier signal; and a second Class A amplifier stage responsive to said amplified received modulated carrier signal for deriving said received binary information in rectangular wave form.

Regarding claim 40, the prior art of record does not teach that said demodulator assembly (comprises:) comprising a Class A amplifier stage responsive to said received modulated carrier signal to derive an amplified received modulated carrier signal; a reference oscillator with a reference output at said carrier frequency; and a digital signal processor responsive to said reference output and to said amplified received modulated carrier signal to effect a comparison therebetween and propagate said first binary signal in the absence of a said wavelet and said second binary signal in the presence of a wavelet at said amplified received modulated carrier signal.

Regarding claims 45-48, the prior art of record does not teach that said synchronizer assembly includes an ANDing assembly having said synchronizing control outputs upon the synchronized occurrence of said first and second binary signals with a said crossover output.

Regarding claims 49-54, the prior art of record does not teach that a filter assembly responsive to said mixed output to derive a select intermediate carrier output at a select said intermediate frequency component; and a detector assembly responsive to said select intermediate carrier output to derive a binary information output corresponding with said binary information of said digital information stream.

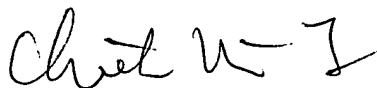
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chieh M. Fan whose telephone number is (571) 272-3042. The examiner can normally be reached on Monday-Friday 8:00AM-5:30PM, Alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on (571) 272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Chieh M Fan  
Primary Examiner  
Art Unit 2634

cmf  
May 4, 2005